

1-30-04

PHA 4159.26 (3203/1A)
PATENT

1624\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Michael S. South et al.

Art Unit 1624

Serial No. 10/009,447

Filed April 3, 2002

Confirmation No. 1709

For SUBSTITUTED POLYCYCLIC ARYL AND HETEROARYL PYRIMIDINONES
USEFUL AS ANTICOAGULANTS

January 29, 2004

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

SIR:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97 and 1.98 and MPEP 609, and in compliance with the
* duty of disclosure set forth in 37 C.F.R. 1.56, applicants submit copies of the references listed on
the attached PTO/SB/08A for consideration by the Patent and Trademark Office in the above-
entitled application and to be made of record therein.

* A check in the amount of \$ 180.00 is enclosed to cover the fee specified in 37 CFR
§1.17(p) for submission of this Information Disclosure Statement.

Respectfully submitted,

Bradley S. Schammel, Reg. No. P54,667
SENNIGER, POWERS, LEAVITT & ROEDEL
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

02/03/2004 SSANDARA 00000021 10009447

01 FC:1806

180.00 OP

BSS/JPK/mlw

Express Mail Label No. EV 272751999 US

PTQ/SB/08A SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/009,447
				Filing Date	April 3, 2002
				Confirmation Number	1709
				First Named Inventor	Michael S. South
				Group Art Unit	1624
				Examiner Name	Venkataraman Balasubramanian
Sheet	1	of	2	Attorney Docket No.	PHA 4159.26 (3203/1A)

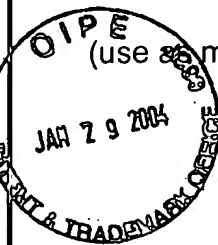
U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code ² (if known)				
	58	4,489,096	B1	Terao et al.	12-18-1984		
	59	4,851,413	B1	Terao et al.	07-25-1989		
	60	4,992,469	B1	Ozawa et al.	02-12-1991		
	61	5,008,267		Katakami, et al.	04-16-1991		
	62	5,304,658	B1	Terao et al.	04-19-1994		
	63	5,741,819	B1	Illig et al.	04-12-1998		
	64	6,180,627	B1	Blagg et al.	01-30-2001		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number ⁴	Kind Code ² (if known)			
	65	DE	198 51 421	A1	Boehringer Ingelheim Pharma KG	05-11-2000	A
	66	EP	0 354 495	A1	Godecke Aktiengesellschaft	02-14-1990	A
	67	WO	98/09987	A1	Biochem Pharma, Inc.	03-12-1998	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT 				Complete if Known	
				Application Number	10/009,447
				Filing Date	April 3, 2002
				Confirmation Number	1709
				First Named Inventor	Michael S. South
				Group Art Unit	1624
				Examiner Name	Venkataraman Balasubramanian
Sheet	2	of	2	Attorney Docket No.	PHA 4159.26 (3203/1A)

	68	WO	99/43660	A1	Neurogen Corporation	09-02-1999	
	69	WO	99/48892	A1	Merck & Sharp & Dohme Limited	09-30-1999	

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	70	COBURN, C.A., "Small-molecule direct thrombin inhibitors 1997-2000." Expert Opinions on Therapeutic Patents, 2001, 721-738, Vol. 11, No. 5	
	71	XP-002182132 - DARVAS, et al., "Investigation of the Common Mechanism of Action of Antibacterial Compounds Containing .gamma.-pyridone-.beta.-carboxylic acid Structure by Principal Component." Arzneim.-Forsch., 1979, pp. 1334-1339, Vol. 29, 9.	
	72	XP-002172033 - KOHAMA, et al., "Preparation of Piperidinyloxyacetylaminobenzoylalanine Derivatives and Analogs as Antithrombotics." JP 07,233,148.	
	73	XP-002187583 - MOERNER, Hoppe-Seyler's Z. Physiol. Chem., 69, 1910; 357.	
	74	PATEL, et al., "Directed Aminomethylation of 3-Hydroxy-3(1H)-pyridinones and 3-hydroxy-4(1H)-pyridinones: Synthesis of iso-Deferiprone." Tetrahedron, 1996, pp. 1835-1840, Vol. 52, No. 5.	
	75	XP-002182410 - TRE COURT, et al., "First Synthesis of (+)-harzianopyridone by Metalation of Polysubstituted O-pyridylcarbamates." J. Heterocycl. Chem., 1995, pp. 1117-1114, Vol. 32, No. 4	
	76	TULINSKY, et al., "Novel Asymmetric Synthesis of Atropisomeric 6-Aryl Pyrazinones via an Unusual Chirality Transfer Process." J. Org. Chem., 1999, pp. 93-100, Vol. 64, No. 1.	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.